

## **ABSTRACT OF THE DISCLOSURE**

After forming a resist film of a chemically amplified resist material, pattern exposure is carried out by selectively irradiating the resist film with exposing light while supplying, onto the resist film, a solution of perfluoropolyether that includes water and is  
5 circulated and temporarily stored in a solution storage. After the pattern exposure, the resist film is subjected to post-exposure bake and then is developed with an alkaline developer. Thus, a resist pattern made of an unexposed portion of the resist film can be formed in a good shape.